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Department of Environmental Quality
Division of Air Quality

Site ID: 10142

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Title V Operating Permit

PERMIT NUMBER: 1100055001
DATE OF PERMIT: May 3, 2002
Date of Last Revision: October 23, 2003

This Operating Permit is issued to, and applies to the following:

Name of Permittee:

Stericycle Incorporated
28161 North Keith Drive
Lake Forest, IL 60045

Permitted Location:

BFI Medical Waste Incinerator
90 North 1100 West
North Salt Lake, UT 84054

UTM coordinates: 4,521,849 meters Northing, 420,687 meters Easting
SIC code: 4953

ABSTRACT

BFI Medical Waste, Inc (BFI), a wholly-owned subsidiary of Stericycle, Inc., owns and operates an area source in North Salt Lake, Utah. The primary emission unit at the source is a hospital/medical/infectious waste incinerator (HMIWI) which is subject to R307-220-3 (State Plan for HMIWIs) and R307-222 (State Rule for HMIWIs). Both the State Plan and Rule require all HMIWIs to apply for and obtain a Title V permit. The HMIWI is equipped with a waste heat boiler, carbon injection, electrostatic precipitator (ESP), and wet gas absorber. Support equipment at the source include an emergency generator and sodium bicarbonate silo equipped with a fabric filter.

UTAH AIR QUALITY BOARD

By:

Richard W. Sprott, Executive Secretary

Prepared By:

Robert Grandy

Operating Permit History

5/3/2002 - Permit issued	Action initiated by an initial operating permit application	
10/23/2003 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	To include an identification number for a newly issued AO. This is the result of a "replacement in kind" for the ESP and involves no changes in permit requirements.

Table of Contents

Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

Section I: General Provisions

I.A. **Federal Enforcement.**

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

I.B. **Permitted Activity(ies).**

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

I.C. **Duty to Comply.**

I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))

I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))

I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))

I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay

any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

I.D. **Permit Expiration and Renewal.**

I.D.1 **This permit is issued for a fixed term of five years and expires on May 3, 2007**. (R307-415-6a(2))

I.D.2 Application for renewal of this permit is due by November 3, 2006. An application may be submitted early for any reason. (R307-415-5a(1)(c))

I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

I.E. **Application Shield.**

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

I.F. **Severability.**

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

I.G. **Permit Fee.**

I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))

I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

I.H. **No Property Rights.**

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

I.I. **Revision Exception.**

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

I.J. **Inspection and Entry.**

I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:

I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))

I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))

I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))

I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))

I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

I.K. **Certification.**

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

I.L. **Compliance Certification.**

I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than **May 2, 2003** and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))

I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;

I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such

methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;

I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and

I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.

I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
EPA, Region VIII
999 18th Street, Suite 300
Denver, CO 80202-2466

I.M. **Permit Shield.**

I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:

I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))

I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))

I.M.2 Nothing in this permit shall alter or affect any of the following:

I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))

I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b)

I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

I.N. **Emergency Provision.**

I.N.1 An "emergency" is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))

I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))

I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))

I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))

I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))

I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))

I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))

I.O. **Operational Flexibility.**

Operational flexibility is governed by R307-415-7d(1).

I.P. **Off-permit Changes.**

Off-permit changes are governed by R307-415-7d(2).

I.Q. **Administrative Permit Amendments.**

Administrative permit amendments are governed by R307-415-7e.

I.R. **Permit Modifications.**

Permit modifications are governed by R307-415-7f.

I.S. **Records and Reporting.**

I.S.1 Records.

I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii)

I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))

I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.

I.S.1.b.2 The date analyses were performed.

I.S.1.b.3 The company or entity that performed the analyses.

I.S.1.b.4 The analytical techniques or methods used.

I.S.1.b.5 The results of such analyses.

I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.

I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.

I.S.2 Reports.

I.S.2.a Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))

I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i)

I.S.2.c The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. **Prompt, as used in this condition, shall be defined as written notification within 7 days**. Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))

I.S.3 Notification Addresses.

I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:

Utah Division of Air Quality
P.O. Box 144820
Salt Lake City, UT 84114-4820
Phone: 801-536-4000

I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

<u>For annual compliance certifications</u>

Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and
Environmental Justice (mail code 8ENF)
999 18th Street, Suite 300
Denver, CO 80202-2466

<u>For reports, notifications, or other correspondence related to permit modifications, applications, etc.</u>

Environmental Protection Agency, Region VIII
Office of Partnerships & Regulatory Assistance
Air & Radiation Program (mail code 8P-AR)
999 18th Street, Suite 300
Denver, CO 80202-2466
Phone: 303-312-6440

I.T. **Reopening for Cause.**

I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

I.T.2 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

I.T.3

I.U. **Inventory Requirements.**

I.U.1 An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

I.U.2 A Hazardous Air Pollutant Inventory shall be submitted in accordance with the procedures of R307-155, Hazardous Air Pollutant Inventory. (R307-155)

I.U.3 An emission statement shall be submitted in accordance with the procedures in R307-158, Emission Statement Inventory. (R307-158)

Section II: SPECIAL PROVISIONS

II.A. **Emission Unit(s) Permitted to Discharge Air Contaminants.**

(R307-415-4(3)(a) and R307-415-4(4))

II.A.1 **Emergency Generator** (designated as EG)
Unit Description: One diesel-fired 200 hp emergency generator.

II.A.2 **Sodium Bicarbonate Silo** (designated as SBS)
Unit Description: One sodium bicarbonate silo equipped with a fabric filter.

II.A.3 **Incinerator** (designated as HMIWI)
Unit Description: One 2,500 lb/hr, two chamber, medical waste incinerator with natural gas-fired auxiliary burners, a bypass stack and a waste heat boiler. The emission control system includes an evaporator, carbon injection, ESP, and wet gas absorber.

II.B. **Requirements and limitations.**

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated: (R307-415-6a(1))

II.B.1 **Conditions on permitted source (Source-wide)**

II.B.1.a **Condition:**

Visible emissions caused by fugitive dust shall not exceed 10% at the property boundary, and 20% onsite except during periods when wind speeds exceed 25 miles per hour and control measures in the most recently approved fugitive dust control plan are being taken. [Authority granted under R307-309-3(1) & R307-309-4(3); condition originated in R307-309]

II.B.1.a.1 **Monitoring:**

In lieu of monitoring via visible emissions observations, adherence to the most recently approved fugitive dust control plan shall be monitored to demonstrate that appropriate measures are being implemented to control fugitive dust.

II.B.1.a.2 **Recordkeeping:**

Records of measures taken to control fugitive dust shall be maintained to demonstrate adherence to the most recently approved fugitive dust control plan. If wind speeds are measured to establish an exception from the above visible emissions limits, records of those measurements shall be maintained. Records shall be maintained as described in Provision I.S.1 of this permit.

II.B.1.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.b **Condition:**

The permittee shall comply with the applicable requirements for servicing of motor vehicle air conditioners pursuant to 40 CFR 82, Subpart B - Servicing of Motor Vehicle Air Conditioners. [Authority granted under 40 CFR 82.30(b); condition originated in 40 CFR 82]

II.B.1.b.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart B.

II.B.1.b.2 **Recordkeeping:**

All records required in 40 CFR 82, Subpart B shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

II.B.1.b.3 **Reporting:**

All reports required in 40 CFR 82, Subpart B shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

II.B.1.c **Condition:**

The permittee shall comply with the applicable requirements for recycling and emission reduction for class I and class II refrigerants pursuant to 40 CFR 82, Subpart F - Recycling and Emissions Reduction. [Authority granted under 40 CFR 82.150(b); condition originated in 40 CFR 82]

II.B.1.c.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart F.

II.B.1.c.2 **Recordkeeping:**

All records required in 40 CFR 82, Subpart F shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

II.B.1.c.3 **Reporting:**

All reports required in 40 CFR 82, Subpart F shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

II.B.1.d **Condition:**

Records shall be maintained of the material (salt, crushed slag, or sand) applied to the roads. [Authority granted under R307-307; condition originated in R307-307]

II.B.1.d.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.d.2 **Recordkeeping:**

The following records shall be maintained as outlined in Provision I.S.1 of this permit:

For Salt - the quantity applied, the percent by weight of insoluble solids in the salt, and the percentage of the material that is sodium chloride (NaCl).

For Sand or Crushed Slag - the quantity applied and the percent by weight of fine material which passes the number 200 sieve in a standard gradation analysis. (origin: R307-307)

II.B.1.d.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2 **Conditions on Emergency Generator (EG)**

II.B.2.a **Condition:**

Sulfur content of any fuel oil burned shall be no greater than 0.85 lb/MMBtu heat input. [Authority granted under R307-203-1; condition originated in R307-203]

II.B.2.a.1 **Monitoring:**

For each delivery of oil, the permittee shall either:

(1) Determine the fuel sulfur content expressed as lb/MMBtu in accordance with the methods of the American Society for Testing Materials (ASTM) and Equation 1;

(2) Inspect the fuel sulfur content expressed as lb/MMBtu determined by the vendor using methods of the ASTM and Equation 1; or

(3) Inspect documentation provided by the vendor that indirectly demonstrates compliance with this provision.

Equation 1:

Fuel Sulfur Content, lb/MMBtu = [(Weight percent sulfur/100) x Density (lb/gal)] / [(gross heating value (Btu/gal)) x (1 MMBtu/1,000,000 Btu)]

II.B.2.a.2 **Recordkeeping:**

Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.2.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.b **Condition:**

Visible emissions shall be no greater than 20 percent opacity except for operation not exceeding 3 minutes in any hour. [Authority granted under R307-201-1(4); condition originated in R307-201-1]

II.B.2.b.1 **Monitoring:**

An opacity observation of the emission unit shall be performed in any semi-annual period (i.e., January through June, July through December) that the emission unit is operated. The opacity observation can be conducted anytime during the semi-annual period while the unit is operating. The opacity observation shall be conducted by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than condensed water vapor are observed from the emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial visual emission observation. The opacity

determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

II.B.2.b.2 **Recordkeeping:**

Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.2.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3 **Conditions on Sodium Bicarbonate Silo (SBS)**

II.B.3.a **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Authority granted under R307-201-1(1); condition originated in R307-201-1]

II.B.3.a.1 **Monitoring:**

A visual observation of the silo shall be performed once during each filling operation by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. The individual is not required to be a certified visible emissions observer (VEO). If any visible emissions are observed, filling operations shall be suspended and the dust control device as well as any associated ducting shall be inspected. Any conditions existing outside of normal operational parameters shall be corrected and filling activities may resume. Upon resumption of filling operations a 40 CFR 60, Appendix A, Method 9 opacity determination of the silo shall be performed by a certified observer.

II.B.3.a.2 **Recordkeeping:**

Results of monitoring shall be maintained as described in Provision I.S.1 of this permit.

II.B.3.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4 **Conditions on Incinerator (HMIWI)**

II.B.4.a **Condition:**

Operator training and qualification requirements.

(a) The permittee shall not allow the affected emission unit to operate at any time unless a fully trained and qualified HMIWI operator is accessible, either at the facility or available within 1 hour. The trained and qualified HMIWI operator may operate the HMIWI directly or be the direct supervisor of one or more HMIWI operators.

(b) Operator training and qualification shall be obtained by completing the requirements included in paragraphs (c) through (g) of this condition.

(c) Training shall be obtained by completing an HMIWI operator training course that includes, at a minimum, the following provisions:

1) 24 hours of training on the following subjects:

i. Environmental concerns, including pathogen destruction and types of emissions;

ii. Basic combustion principles, including products of combustion;

iii. Operation of the type of incinerator to be used by the operator, including proper startup, waste charging, and shutdown procedures;

iv. Combustion controls and monitoring;

v. Operation of air pollution control equipment and factors affecting performance;

vi. Methods to monitor pollutants (monitoring of HMIWI and air pollution control device operating parameters) and equipment calibration procedures (where applicable);

vii. Inspection and maintenance of the HMIWI and air pollution control devices;

viii. Actions to correct malfunctions or conditions that may lead to malfunction;

ix. Bottom and fly ash characteristics and handling procedures;

x. Applicable Federal, State, and local regulations, including those contained in 40 CFR 60 Subparts Ce, R307-222 and R307-220-3;

xi. Work safety procedures;

xii. Pre-startup inspections; and

xiii. Recordkeeping requirements.

2) An examination designed and administered by the instructor.

3) Reference material distributed to the attendees covering the course topics.

(d) Qualification shall be obtained by:

1) Completion of a training course that satisfies the criteria under paragraph (c) of this condition; and

2) Either 6 months experience as an HMIWI operator, 6 months experience as a direct supervisor of an HMIWI operator, or completion of at least two burn cycles under the observation of two qualified HMIWI operators.

(e) Qualification is valid from the date on which the examination is passed or the completion of the required experience, whichever is later.

(f) To maintain qualification, the trained and qualified HMIWI operator shall complete and pass an annual review or refresher course of at least 4 hours covering, at a minimum, the following:

1) Update of regulations;

2) Incinerator operation, including startup and shutdown procedures;

3) Inspection and maintenance;

4) Responses to malfunctions or conditions that may lead to malfunction; and

5) Discussion of operating problems encountered by attendees.

(g) A lapsed qualification shall be renewed by one of the following methods:

1) For a lapse of less than 3 years, the HMIWI operator shall complete and pass a standard annual refresher course described in paragraph (f) of this condition.

2) For a lapse of 3 years or more, the HMIWI operator shall complete and pass a training course with the minimum criteria described in paragraph (c) of this condition.

(h) The permittee shall maintain documentation at the facility that address the following:

1) Summary of the applicable requirements, including a copy of the State Plan for HMIWI (R307-220-3) and R307-222;

2) Description of basic combustion theory applicable to an HMIWI;

3) Procedures for receiving, handling, and charging waste;

4) HMIWI startup, shutdown, and malfunction procedures;

5) Procedures for maintaining proper combustion air supply levels;

6) Procedures for operating the HMIWI and associated air pollution control systems within the standards established under R307-220-3;

7) Procedures for responding to periodic malfunction or conditions that may lead to malfunction;

8) Procedures for monitoring HMIWI emissions;

9) Reporting and recordkeeping procedures; and

10) Procedures for handling ash.

(i) The permittee shall establish a program for reviewing the information listed in paragraph (h) of this condition annually with each HMIWI operator.

1) The initial review of the information listed in paragraph (h) of this condition shall be conducted by September 15, 1999, or prior to assumption of responsibilities affecting HMIWI operation, whichever date is later.

2) Subsequent reviews of the information listed in paragraph (h) of this condition shall be conducted annually.

(j) The information listed in paragraph (h) of this condition shall be kept in a readily accessible location for all HMIWI operators. This information, along with records of training shall be available for inspection by the Executive Secretary's representative upon request.

[Authority granted under Part D of HMIWI State Plan and 40 CFR 60.53c; condition originated in R307-220-3, R307-222]

II.B.4.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.4.a.2 **Recordkeeping:**

The permittee shall comply with the recordkeeping provisions of I.S.1 of this permit and the permittee shall maintain the following information for a period of at least 5 years:

(a) Calendar date of each record;

(b) Records showing the names of HMIWI operators who have completed review of the information in paragraph (h) of this condition as required by paragraph (i) of this condition, including the date of the initial review and all subsequent annual reviews;

(c) Records showing the names of the HMIWI operators who have completed the operator training requirements, including training materials sufficient to document compliance with paragraph (c) of this condition, documentation of training and the dates of the training;

(d) Records showing the names of the HMIWI operators who have met the criteria for qualification of this condition and the dates of their qualification;

All records shall be maintained onsite in either paper copy or computer-readable format, unless an alternative format is approved by the Executive Secretary.

II.B.4.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4.b **Condition:**

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring

results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Authority granted under 40 CFR 60.11(d); condition originated in R307-220-3, R307-222]

II.B.4.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.4.b.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.4.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4.c **Condition:**

Emission Limits

(a) The permittee shall not cause to be discharged into the atmosphere from the affected emission unit any gases that contain stack emissions in excess of the limits presented in Table 1.

(b) The permittee shall not cause to be discharged into the atmosphere from the stack of the affected emission unit any gases that exhibit greater than 10 percent opacity (6-minute block average).

(c) The permittee shall not cause to be discharged into the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period), as determined by EPA Reference Method 22, except as provided in paragraphs (d) and (e) of this condition.

(d) The emission limit specified in paragraph (c) of this condition does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems.

(e) The provisions specified in paragraph (c) of this condition do not apply during maintenance and repair of ash conveying systems. Maintenance and / or repair shall not exceed 10 operating days per calendar quarter unless the permittee obtains written approval from the Executive Secretary establishing a date whereby all necessary maintenance and repairs of ash conveying systems shall be completed.

1) Operating day means a 24-hour period between 12:00 midnight and the following midnight during which any amount of hospital waste or medical / infectious waste is combusted at any time in the HMIWI.

Table 1 Emission Limits

Pollutant	Units (7% Oxygen, dry basis)	Limit
Particulate matter	Milligrams per dry standard cubic meter (grains per dry standard cubic foot).	34 (0.015)
Carbon monoxide	Parts per million by volume	40
Dioxins/furans	Nanograms per dry standard cubic meter total dioxins/furans (grains per billion dry standard cubic feet) or nanograms per dry standard cubic meter TEQ (grains per billion dry standard cubic feet)	125 (55) or 2.3 (1.0)
Hydrogen chloride	Parts per million by volume or percent reduction.	100 or 93%.
Sulfur dioxide	Parts per million by volume	55
Nitrogen oxides...	Parts per million by volume	250
Lead	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	1.2 (0.52) or 70%
Cadmium	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	0.16 (0.07) or 65%
Mercury (Hg)	Milligrams per dry standard cubic meter (grains per thousand dry standard cubic feet) or percent reduction	0.55 (0.24) or 85%

(f) The emission limits of this condition apply at all times except during periods of startup, shutdown, or malfunction, provided that no hospital waste or medical / infectious waste is charged to the affected emission unit during startup, shutdown, or malfunction.

1) Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused, in part, by poor maintenance or careless operation are not malfunctions. During periods of malfunction the operator shall operate within established parameters as much as possible, and monitoring of all applicable operating parameters shall continue until all waste has been combusted or until the malfunction ceases, whichever comes first.

2) Shutdown means the period of time after all waste has been combusted in the primary chamber. For continuous HMIWI, shutdown shall commence no less than 2 hours after the last charge to the incinerator.

3) Startup means the period of time between the activation of the system and the first charge to the unit. For batch HMIWI, startup means the period of time between activation of the system and ignition of the waste.

4) Hospital waste and medical / infectious waste have the meaning given in 40 CFR 60.51c.

[Authority granted under Part G of HMIWI State Plan, 40 CFR 60.33e, and 40 CFR 60.56c(a); Condition originated in R307-220-3, R307-222]

II.B.4.c.1 **Monitoring:**

The origin of all monitoring requirements is R307-220-3 and R307-222 unless otherwise specified.

A. Stack Testing

(a) Performance test methods are listed in paragraphs A.(a)(1) through A.(a)(14) of monitoring. The use of the bypass stack during a performance test shall invalidate the performance test. Bypass stack means a device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

1) All performance tests shall consist of a minimum of three test runs conducted under representative operating conditions.

2) The minimum sample time shall be 1 hour per test run unless otherwise indicated.

3) EPA Reference Method 1 of appendix A of 40 CFR Part 60 shall be used to select the sampling location and number of traverse points.

4) EPA Reference Method 3 or 3A of appendix A of 40 CFR Part 60 shall be used for gas composition analysis, including measurement of oxygen concentration. EPA Reference Method 3 or 3A of appendix A of 40 CFR Part 60 shall be used simultaneously with each reference method.

5) The pollutant concentrations shall be adjusted to 7 percent oxygen using the following equation:

$C_{adj} = C_{meas} (20.9—7) / (20.9—\%O_2)$ where:

C_{adj} = pollutant concentration adjusted to 7 percent oxygen;
C_{meas} = pollutant concentration measured on a dry basis;
(20.9—7)=20.9 percent oxygen—7 percent oxygen (defined oxygen correction basis);

20.9= oxygen concentration in air, percent; and
$\%O_2$ = oxygen concentration measured on a dry basis, percent.

6) EPA Reference Method 5 or 29 of appendix A of 40 CFR Part 60 shall be used to measure the particulate matter emissions.

7) EPA Reference Method 9 of appendix A of 40 CFR Part 60 shall be used to measure stack opacity.

8) EPA Reference Method 10 or 10B of appendix A of 40 CFR Part 60 shall be used to measure the CO emissions.

9) EPA Reference Method 23 of appendix A of 40 CFR Part 60 shall be used to measure total dioxin / furan emissions. The minimum sample time shall be 3 hours per test run and the minimum sample volume shall be 2.5 dscm. If the affected emission unit has selected the toxic equivalency standards for dioxin / furans, the following procedures shall be used to determine compliance:

   i. Measure the concentration of each dioxin / furan tetra- through octa-congener emitted using EPA Reference Method 23.

   ii. For each dioxin / furan congener measured in accordance with paragraph A.(a)(9)(i) of monitoring, multiply the congener concentration by its corresponding toxic equivalency factor specified in Table 2.

   iii. Sum the products calculated in accordance with paragraph A.(a)(9)(ii) of monitoring to obtain the total concentration of dioxins / furans emitted in terms of toxic equivalency.

10) EPA Reference Method 26 of appendix A of 40 CFR Part 60 shall be used to measure HCl emissions. If the permittee has selected the percentage reduction standards for HCl, the percentage reduction in HCl emissions ($\%R_{HCl}$) is computed using the following formula:

$\%R_{HCl} = ((E_i - E_o)/E_i)$ times 100

Where:

$\%R_{HCl}$ = percentage reduction of HCl emissions achieved;
E_i = HCl emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis); and
E_o = HCl emission concentration measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

Table 2 Toxic Equivalency Factors

Dioxin/furan congener	Toxic equivalency factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	0.5
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
Octachlorinated dibenzo-p-dioxin	0.001
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.5
1,2,3,7,8-pentachlorinated dibenzofuran...	0.05
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01

11) EPA Reference Method 29 of appendix A of 40 CFR Part 60 shall be used to measure Pb, Cd, and Hg emissions. If the permittee has selected the percentage reduction standards for metals, the percentage reduction in emissions ($\%R_{metal}$) is computed using the following formula:

$$\%R_{metal} = ((E_i - E_o)/E_i) \text{ times } 100$$

Where:

$\%R_{metal}$ = percentage reduction of metal emission (Pb, Cd, or Hg) achieved;
E_i = metal emission concentration (Pb, Cd, or Hg) measured at the control device inlet, corrected to 7 percent oxygen (dry basis); and
E_o = metal emission concentration (Pb, Cd, or Hg) measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

12) The EPA Reference Method 22 of appendix A of 40 CFR Part 60 shall be used to determine compliance with the fugitive ash emission limit. The minimum observation time shall be a series of three 1-hour observations.

13) EPA Reference Method 6 or 6C of appendix A of 40 CFR Part 60 shall be used to measure SO_2 emissions. [R307-165-1, R307-165]

14) EPA Reference Methods 7, 7A, 7B, 7C, 7D, or 7E of appendix A of 40 CFR Part 60 shall be used to measure NO_x emissions. [R307-165-1, R307-165]

(b) The permittee shall:

1) Determine compliance with the opacity limit by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods listed in paragraph A.(a) of monitoring.

2) Determine compliance with the PM, CO, and HCl emission limits by conducting an annual performance test (no more than 12 months following the previous performance test) using the applicable procedures and test methods listed in paragraph A.(a) of monitoring. If all three performance tests over a 3-year period indicate compliance with the emission limit for a pollutant (PM, CO, or HCl), the permittee may forego a performance test for that pollutant for the subsequent 2 years. At a minimum, a performance test for PM, CO, and HCl shall be conducted every third year (no more than 36 months following the previous performance test). If a performance test conducted every third year indicates compliance with the emission limit for a pollutant (PM, CO, or HCl), the permittee may forego a performance test for that pollutant for an additional 2 years. If any performance test indicates noncompliance with the respective emission limit, a performance test for that pollutant shall be conducted annually until all annual performance tests over a 3-year period indicate compliance with the emission limit. The use of the bypass stack during a performance test shall invalidate the performance test.

3) Determine compliance with the visible emission limits for fugitive emissions from flyash / bottom ash storage and handling by conducting a performance test using EPA Reference Method 22 on an annual basis (no more than 12 months following the previous performance test).

4) The permittee shall conduct emission testing using the applicable test methods in paragraph A.(a) of monitoring for Dioxin/Furan, SO_2, NO_x, Pb, Cd, and Hg at least once every five years. [R307-165-1, R307-165]

(c) At least 30 days prior to conducting any emission testing, the permittee shall notify the Executive Secretary of the date, time and place of such testing and submit a test protocol. If determined necessary by the Executive Secretary, the permittee shall also attend a pretest conference. [R307-165-2, R307-165]

(d) All tests shall be conducted while the source is operating at the maximum production or combustion rate at which such source will be operated. During the tests, the source shall burn fuels or combustion of fuels, use raw materials, and maintain process conditions representative of normal operations, and shall operate under such other relevant conditions as the Executive Secretary shall specify. [R307-165-3, R307-165]

B. Operating Parameters

(a) The permittee shall

1) Establish the maximum and minimum operating parameters, indicated in Table 3, as site specific operating parameters during the initial performance test to determine compliance with the emission limits; and

2) Ensure that the affected emission unit does not operate above any of the maximum operating parameters or below any of the minimum operating parameters listed in Table 3 and measured as 3-hour rolling averages (calculated each hour as the average of the previous 3 operating hours) at all times except during periods of startup, shutdown and malfunction. Operating parameter limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating parameter(s) shall constitute a violation of established operating parameter(s).

i. Operation means the period during which waste is combusted in the incinerator excluding periods of startup or shutdown.

Table 3. Operating Parameters to be Monitored and Minimum Measurement and Recording Frequencies

Operating parameters	Minimum Frequency	
	Data Measurement	Data Recording
Maximum charge rate, lbs/hr (3-HRA)	Continuous	Once per hour
Minimum secondary chamber temperature, F (3-HRA)	Continuous	Once per minute
Maximum reactor inlet temperature, F (3-HRA)	Continuous	Once per minute
Minimum carbon injection, lbs/hr (3-HRA)	Hourly	Once per hour
Minimum scrubber liquor flow rate, lbs/hr (3-HRA)	Continuous	Once per minute
Minimum scrubber liquor pH (3-HRA)	Continuous	Once per minute

3-HRA = 3-hour rolling averages

Minimum scrubber liquor flow rate means 90 percent of the highest 3-hour average liquor flow rate at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all applicable emission limits.

(b) Except as provided in paragraph B.(c) of monitoring:

1) Operation of the affected emission unit above the maximum charge rate and below the minimum secondary chamber temperature (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the CO emission limit.

i. Maximum charge rate means 110 percent of the lowest 3-hour average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits.

ii. Minimum secondary chamber temperature means 90 percent of the highest 3-hour average secondary chamber temperature (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM, CO, or dioxin /

furan emission limits. Secondary chamber means a component of the HMIWI that receives combustion gases from the primary chamber and in which the combustion process is completed. Primary chamber means the chamber in an HMIWI that receives waste material, in which the waste is ignited, and from which ash is removed.

2) Operation of the affected emission unit above the maximum reactor inlet temperature, above the maximum charge rate, and below the minimum dioxin / furan carbon flow rate (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the dioxin / furan emission limit.

   i. Maximum reactor inlet temperature means 110 percent of the lowest 3-hour average temperature at the inlet to the reactor (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the dioxin / furan emission limit.

   ii. Minimum dioxin / furan carbon flow rate means 90 percent of the highest 3-hour average carbon flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the dioxin / furan emission limit.

3) Operation of the affected emission unit above the maximum charge rate and below the minimum scrubber liquor pH (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the HCl emission limit.

   i. Minimum scrubber liquor pH means 90 percent of the highest 3-hour average liquor pH at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the HCl emission limit.

4) Operation of the affected emission unit above the maximum charge rate and below the minimum Hg carbon flow rate (each measured on a 3-hour rolling average) simultaneously shall constitute a violation of the Hg emission limit.

   i. Minimum Hg carbon flow rate means 90 percent of the highest 3-hour average carbon flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the Hg emission limit.

5) Use of the bypass stack (except during startup, shutdown, or malfunction) shall constitute a violation of the PM, dioxin / furan, HCl, Pb, Cd and Hg emission limits.

(c) The permittee may conduct a repeat performance test within 30 days of violation of applicable operating parameter(s) to demonstrate that the affected emission unit is not in violation of the applicable emission limit(s). Repeat performance tests conducted pursuant to this paragraph shall be conducted using the identical operating parameters that indicated a violation under paragraph B.(b) of monitoring.

(d) The permittee may conduct a repeat performance test at any time to establish new values for the operating parameters. The Executive Secretary may request a repeat performance test at any time.

(e) The permittee shall install, calibrate (to manufacturers' specifications), maintain, and operate devices (or establish methods) for monitoring the applicable maximum and minimum operating parameters listed in Table 3 such that these devices (or methods) measure and record values for these operating parameters at the frequencies indicated in Table 3 at all times except during periods of startup and shutdown.

(f) The permittee shall install, calibrate (to manufacturers' specifications), maintain, and operate a device or method for measuring the use of the bypass stack including date, time, and duration.

(g) The permittee shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected emission unit is combusting hospital waste and / or medical / infectious waste.

(h) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of 40 CFR 60 shall be used. [40 CFR 60.13(f), R307-220-3]

II.B.4.c.2 **Recordkeeping:**

The origin of all record keeping requirements is R307-220-3 and R307-222 unless otherwise specified.

The permittee shall comply with the recordkeeping provisions of I.S.1 of this permit and the permittee shall maintain the following information for a period of at least 5 years:

1) Calendar date of each record;

2) Records of the following data:

i. Concentrations of any pollutant listed in this condition;

ii. Results of fugitive emissions (by EPA Reference Method 22) tests;

iii. HMIWI charge dates, times, and weights and hourly charge rates;

iv. Reactor inlet temperatures during each minute of operation;

v. Amount and type of carbon used during each hour of operation;

vi. Secondary chamber temperatures recorded during each minute of operation;

vii. Liquor flow rate to the wet scrubber inlet during each minute of operation;

viii. pH at the inlet to the wet scrubber during each minute of operation; and

ix. Records indicating use of the bypass stack, including dates, times, and durations;

3) Identification of calendar days for which data on emission rates or operating parameters specified under paragraph (2) of record keeping have not been obtained, with an identification of the emission rates or operating parameters not measured, reasons for not obtaining the data, and a description of corrective actions taken;

4) Identification of calendar days, times and durations of malfunctions, a description of the malfunction and the corrective action taken;

5) Identification of calendar days for which data on emission rates or operating parameters specified under paragraph (2) of record keeping exceeded the applicable limits, with a description of the exceedances, reasons for such exceedances, and a description of corrective actions taken;

6) The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and / or to establish operating parameters, as applicable;

7) Records of calibration of any monitoring devices as required under paragraphs B.(e) and (f) of monitoring; and

8) The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control

equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b), R307-220-3]

All records shall be maintained onsite in either paper copy or computer-readable format, unless an alternative format is approved by the Executive Secretary.

II.B.4.c.3 **Reporting:**

The origin of all reporting requirements is R307-220-3 and R307-222 unless otherwise specified.

(a) A semi-annual report shall be submitted by September 14, 2002, and subsequent reports shall be submitted no more than 6 months following the previous report. The report shall include the information specified in (a)(1) through (a)(8) of reporting. All reports shall be signed by the facility's manager. Facilities manager means the individual in charge of purchasing, maintaining, and operating the HMIWI or the owner's or operator's representative responsible for the management of the HMIWI. Alternative titles may include director of facilities or vice president of support services.

1) The values for the site-specific operating parameters established pursuant to paragraph B.(a) of monitoring.

2) The highest maximum operating parameter and the lowest minimum operating parameter, as applic able, for each operating parameter recorded for the calendar year being reported, pursuant to paragraph B.(a) of monitoring.

3) The highest maximum operating parameter and the lowest minimum operating parameter, as applicable for each operating parameter recorded pursuant to paragraph B.(a) of monitoring for the calendar year preceding the year being reported, in order to provide the Executive Secretary with a summary of the performance of the affected emission unit over a 2-year period.

4) Any information recorded under paragraphs (3) through (5) of record keeping for the calendar year being reported.

5) Any information recorded under paragraphs (3) through (5) of record keeping for the calendar year preceding the year being reported, in order to provide the Executive Secretary with a summary of the performance of the affected emission unit over a 2-year period.

6) If a performance test was conducted during the reporting period, the results of that test.

7) If no exceedances or malfunctions were reported under paragraphs (3) through (5) of record keeping for the calendar year being

reported, a statement that no exceedances occurred during the reporting period.

8) Any use of the bypass stack, the duration, reason for malfunction, and corrective action taken.

(b) The permittee shall also comply with the reporting provisions of Section I of this permit.

II.C. **Emissions Trading.**

(R307-415-6a(10))

Not applicable to this source.

II.D. **Alternative Operating Scenarios.**

(R307-415-6a(9))

Not applicable to this source.

Section III: PERMIT SHIELD

The following requirements have been determined to be not applicable to this source in accordance with Provision I.M, Permit Shield:

III.A. **40 CFR 68 (Risk Management Program)**

This regulation is not applicable to the permitted source (Source-wide) because BFI does not operate any processes that contain or process chemicals that meet the minimum threshold quantities of the subject rule.

III.B. **40 CFR 60 Subpart Kb (Miscellaneous Storage Tanks Storing VOC-containing liquids)**

This regulation is not applicable to the permitted source (Source-wide) because BFI does not have any storage tanks with a design capacity greater than 40 cubic meters.

Section IV: ACID RAIN PROVISIONS.

This source is not subject to Title IV. This section is not applicable.

REVIEWER COMMENTS

This operating permit incorporates all applicable requirements contained in the following documents:

DAQE-AN0142007-03 dated September 26, 2003

1. **Comment on an item originating in R307-220-3 and R307-222 regarding Incinerator (Unit HMIWI)**

   Alternative Monitoring Under Part H.2.(i) of the State Plan: In accordance with Part H.2.(i) of the State Plan for medical waste incinerators, the permittee of an affected facility using an air pollution control device other than a dry scrubber followed by a fabric filter, a wet scrubber, or a dry scrubber followed by a fabric filter and a wet scrubber to comply with the emission limits under Part G of the State Plan shall petition the Executive Secretary for other site-specific operating parameters to be established during the initial performance test and continuously monitored thereafter.

   Since Stericycle does not use one of the listed control devices, they filed a petition on January 4, 2002, for alternative monitoring. Their petition was granted on January 9, 2002, and includes the following monitoring parameters:

   *Maximum Charge Rate
   *Minimum Secondary Chamber Temperature
   *Maximum Reactor Inlet Temperature
   *Minimum dioxin/furan/Hg sorbent flow rate
   *Minimum scrubber liquor flow rate
   *Minimum scrubber liquor pH

   In addition, the monitoring provisions of Part H.(d, g, and h) have been modified to apply to the Stericycle system and included to document compliance with the emission limits. [Comment last updated on 3/21/2002]

2. **Comment on an item originating in R307-220-3 and R307-222 regarding Incinerator (Unit HMIWI)**

   Waste Management Plan Not Required: Part E of the State Plan for medical waste incinerators requires each facility to prepare and submit a waste management plan to the Executive Secretary. The waste management plan is required for health care facilities which have an incinerator. Stericycle is not a health care facility and is not subject to the waste management plan requirements. [Comment last updated on 1/15/2002]

3. **Comment on an item originating in R307-201 regarding Incinerator (Unit HMIWI)**

   R307-201-1(2) does not apply to medical waste incinerators: R307-201-1(2) specifically exempts incinerators from visible emission limitations assigned pursuant to R307-201. The incinerator is subject to a visible emission limitation of 10% under the State Plan for medical waste incinerators. [Comment last updated on 1/15/2002]

4. **Comment on an item originating in R307-220-3 and R307-222 regarding Incinerator (Unit HMIWI)**

   Dioxin/Furan Sampling Time: Part H.2.(ix) of the Utah State Plan for Medical Waste Incinerators requires a minimum sample time for dioxin/furans of 4 hours per test run. At the request of the permittee and under the authority of 40 CFR 60.8(b), the minimum sample time has been revised to at least 3 hours with a minimum sample volume of 2.5 dscm. This revision is consistent the MACT standard for hazardous waste combustors under 40 CFR 63 Subpart EEE. Since the 40 CFR 63 Subpart EEE dioxin/furan standard is lower than the corresponding standard for under the State Plan for Medical Waste Incinerators, the reduced sample time coupled with the limit on sample volume will provide accurate measurements of dioxin/furan emissions at and below the Medical Waste Incinerator standard. The 3 hours sample time will also provide a representative sampling of stack emissions and corresponds with operating parameter limits which are established on a 3 hour rolling average. [Comment last updated on 3/21/2002]

5. **Comment on an item originating in R307-220-3 and R307-222 regarding Incinerator (Unit HMIWI)**

   SO_2 and NO_x emissions testing: SO_2 and NO_x emissions testing: R307-220-3 and R307-222 establish emission limits for SO_2 and NO_x, however, no emission testing is required under these rules. As stated in EPA-453/R-97-006b, no SO_2 and NO_x emission testing is required because the emission limits in the final regulations reflect uncontrolled emissions. Consequently, the EPA indicated that it was unreasonable to impose SO_2 and NO_x monitoring requirements in a technology-based regulation where the facility operator has no control over the emissions and where the emission limit is not likely ever to be exceeded.

   SO_2 and NO_x emissions testing will be reguired at least once every 5 year as required by R307-165. Only an initial performance test for Dioxin/Furan, Pb, Cd, and Hg are required under R307-220-3 and R307-222. Therefore, as required by R307-165, emissions testing for these pollutants will also be required at least once every 5 years. [Comment last updated on 3/26/2002]